

FIG-1

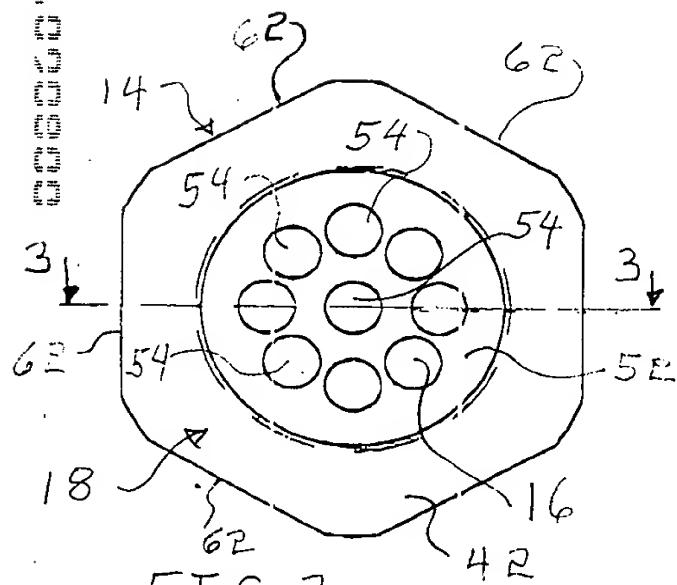


FIG 2

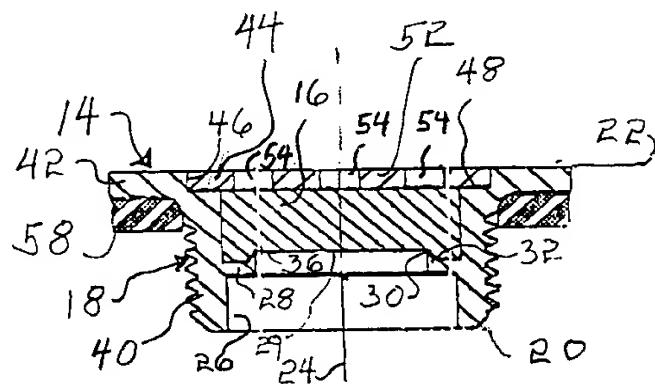


FIG 3

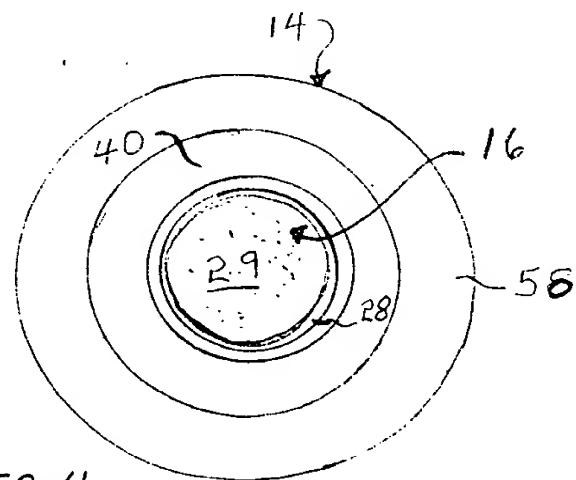


FIG 4

Media	Concen- tration, % by weight	Test Temperature	Average Corrosion Rate per year, mils**			
			°F (°C)	C-22 ^c alloy	C-276 alloy	C-4 alloy
Acetic Acid	99	Boiling		Nil	<1	Nil
Ferric Chloride	10	Boiling		1	2	140
Formic Acid	88	Boiling		<1	1	2
Hydrochloric Acid	1	Boiling		3	13	25
	1.5	Boiling		14	32	64
	2	194 (90)		Nil	1	31
	2	Boiling		61	51	82
	2.5	194 (90)		<1	12	34
	2.5	Boiling		141	85	44
	10	Boiling		400	288	228
Hydrochloric Acid + 42 g/l Fe ₂ (SO ₄) ₃	1	200 (93)		2	41	—
	5	150 (66)		2	5	3
Hydrochloric Acid + 2% HF	5	158 (70)		59	26	34
Hydrofluoric Acid	2	158 (70)		9	9	17
	5	158 (70)		14	10	15
P ₂ O ₅ (Commercial Grade)	38	185 (85)		2	9	—
	44	240 (116)		21	100	—
	52	240 (116)		11	33	—
P ₂ O ₅ + 2000 ppm Cl	38	185 (85)		1	12	—
P ₂ O ₅ + 0.5% HF	38	185 (85)		7	45	—
Nitric Acid	10	Boiling		<1	7	7
	65	Boiling		134	888	217
Nitric Acid + 6% HF	5	140 (60)		67	207	204
Nitric Acid + 25% H ₂ SO ₄ + 4% NaCl	5	Boiling		12	64	97
Nitric Acid + 1% HCl	5	Boiling		<1	8	11
Nitric Acid + 2.5% HCl	5	Boiling		2	21	26
Nitric Acid + 15.8% HCl	8.8	126 (52)		4	33	144 > 10,000

*Average of 4-10 tests.

**To convert mils per year (mpy) to mm per year, divide by 40.

FIG 5

